

10/520061 #3  
PT12 Rec'd PCT/PTO 0 5 JAN 2005

Docket No.: 2611-0229PUS1  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

---

In re Patent Application of:  
Wataru MATSUMOTO

Application No.: Not Yet Assigned

Confirmation No.: N/A

Filed: January 5, 2005

Art Unit: N/A

For: METHOD AND APPARATUS FOR  
GENERATING CHECK MATRIX

Examiner: Not Yet Assigned

**INFORMATION DISCLOSURE STATEMENT (IDS)**

MS PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement accompanies the new patent application submitted herewith.

A copy of each reference on the PTO/SB/08 is attached. Additionally, JP-A-2003-198383 corresponds to U.S. Publication 2004/0186992; and JP-A-2003-115768 corresponds to U.S. Publication 2003/0037298.

JT12 Rec'd PCT/PTO 0 5 JAN 2005

Application No.: Not Yet Assigned

Docket No.: 2611-0229PUS1

A concise explanation of relevance of some of the items listed on form PTO/SB/08 is in the form of an English language copy of a Search Report from a foreign patent office, issued in a counterpart application, which refers to the relevant portions of the references.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

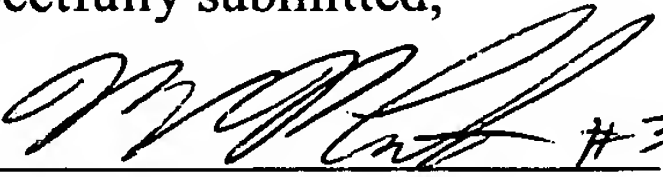
It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Dated: January 5, 2005

MKM/clb

Respectfully submitted,

By  #39,491  
Michael K. Mutter  
Registration No.: 29,680  
BIRCH, STEWART, KOLASCH & BIRCH, LLP  
8110 Gatehouse Rd  
Suite 100 East  
P.O. Box 747  
Falls Church, Virginia 22040-0747  
(703) 205-8000  
Attorney for Applicant

10/520061

PT12 PCT/PTO 05 JAN 2005

PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	Not Yet Assigned
				Filing Date	January 5, 2005
				First Named Inventor	Wataru MATSUMOTO
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	1	Attorney Docket Number	2611-0229PUS1

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	US-2004/0186992-A1	09-23-2004	MATSUMOTO	
	AB	US-2003/0037298-A1	02-20-2003	ELEFThERIOU et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
	BA	JP-2003-198383-A	07-11-2003			
	BB	JP-2003-115768-A	04-18-2003			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	MATSUMOTO, Imai, KETTEIRONTEKI HISEISOKU LDPC FUGO SEKKEIHO", 2002 Nen The Institute of Electronics, Information and Communication Engineers Kiso Kyokai Society Taikai, A-6-12, September 10-13, 2002, page 126.	
	CB	"LOW DENSITY PARITY-CHECK CODES", Robert G. GALLAGER, Cambridge, MA. July 1963, pp. 2-90.	
	CC	"LOW-DENSITY PARITY-CHECK CODES BASED ON FINITE GEOMETRIES: A REDISCOVERY AND NEW RESULTS" IEEE Trans. on Inf. Vol. 47, No. 7. November 2001, pp. 2711-2734.	
	CD	"IMPROVED LOW-DENSITY PARITY-CHECK CODES USING IRREGULAR GRAPHS AND BELIEF PROPAGATION" ISIT 1998. pp. 171	
	CE	"THE CAPACITY OF LOW-DENSITY PARITY-CHECK CODES UNDER MESSAGE-PASSING DECODING", IEEE Trans. Inform. Theory Vol. 47, No. 2. February 2001, pp. 1-42	
	CF	"ANALYSIS OF SUM-PRODUCT DECODING OF LOW-DENSITY PARITY-CHECK CODES USING A GAUSSIAN APPROXIMATION", IEEE Trans. Inform. Theory, Vol. 47, No. 2. pp. 657-670, February 2001.	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
--------------------	--	-----------------	--